SERPENT MOUNDS PROVINCIAL PARK MANAGEMENT PLAN

Ontario

Ministry of Natural Resources

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Serpent Mounds Provincial Park Management Plan

Ministry of
Natural
Resources

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"We are pleased to approve the Serpent Mounds Provincial Park Management Plan, as official policy for the management and development of this park. The plan reflects this Ministry's intent to protect natural and cultural features of Serpent Mounds and maintain and develop high quality opportunities for outdoor recreation and heritage appreciation for both residents of Ontario and visitors to the Province."

Michèle Fordyce

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1. INTRODUCTION

Serpent Mounds Provincial Park (hereafter referred to as "Serpent Mounds" or "the park") is located in one of the prime outdoor recreation areas for the Province of Ontario, namely the Kawartha Lakes Region. For 1982, the park had approximately 18,000 day visitors as well as a 86% campsite occupancy during July/August.

Serpent Mounds is located on Rice Lake, which is part of the Trent-Severn Waterway. More specifically, Serpent Mounds is situated on the north shore of Rice Lake, in the Township of Otonabee, County of Peterborough. The park is approximately 25 km southeast of the City of Peterborough and approximately 140 km northeast of Metro Toronto (see Figure 1).

The park consists of two separate land parcels: Roach Point (29 ha) and Harris Island (79 ha) for a total of 108 hectares (see 3.4, Park Boundary and see Figure 2).

Until 1983, the park consisted of only Roach Point, which is a blunt-ended peninsula of land, jutting into Rice Lake. This parcel was brought into regulation as a provincial park in 1957. It was considered worthy of provincial park status because of its idyllic setting, recreational potential and its provincially-significant 2,000-year-old Indian burial mounds.

The burial mounds are believed to have been created by the Woodland Indians of the Point Peninsula Culture. In total, there are nine mounds, six of which combine to form a serpentine shape, while the other three have oval shapes and stand separate from each other. The site is commemorated with a historical plaque, unveiled in 1961 by the Ontario Archaeological Historic Sites Branch.

With the exception of .2 hectares of land at the very tip of Roach Point, this entire parcel is owned by the Federal Department of Indian Affairs and Northern Development. This government agency administers this land for the local Hiawatha Indian Band, who have entered into an agreement to lease the land to the Ontario Ministry of Natural Resources for a provincial park. The present lease expires in 1995 and the Ministry of Natural Resources may renegotiate the lease at that time if feasible.

In 1983, a second parcel of land, Harris Island, was brought into regulation as part of the park. This island is located immediately offshore of Roach Point, in Rice Lake and is owned by the Ministry of Natural Resources. This island consists of two upland drumlin areas interconnected by an extensive wetland marsh complex. Harris Island is part of a larger Ministry of Natural Resources' Area of Natural and Scientific Interest (A.N.S.I.) because of its two provincially-significant plant species since the islands contain good examples of a mature and developed oak dominated forest. In addition, Harris Island is considered to have regionally-significant earth science (e.g., drumlins) and historical resources.

It is for the purpose of planning, development and management of the park's natural, cultural and recreational resources that this management plan is being prepared.

2. SUMMARY OF SIGNIFICANT ISSUES AND POLICY DECISIONS

The eastern half of Harris Island will be zoned "nature reserve" in light of its "Area of Natural and Scientific" designation.

Figure 1

Regional Context

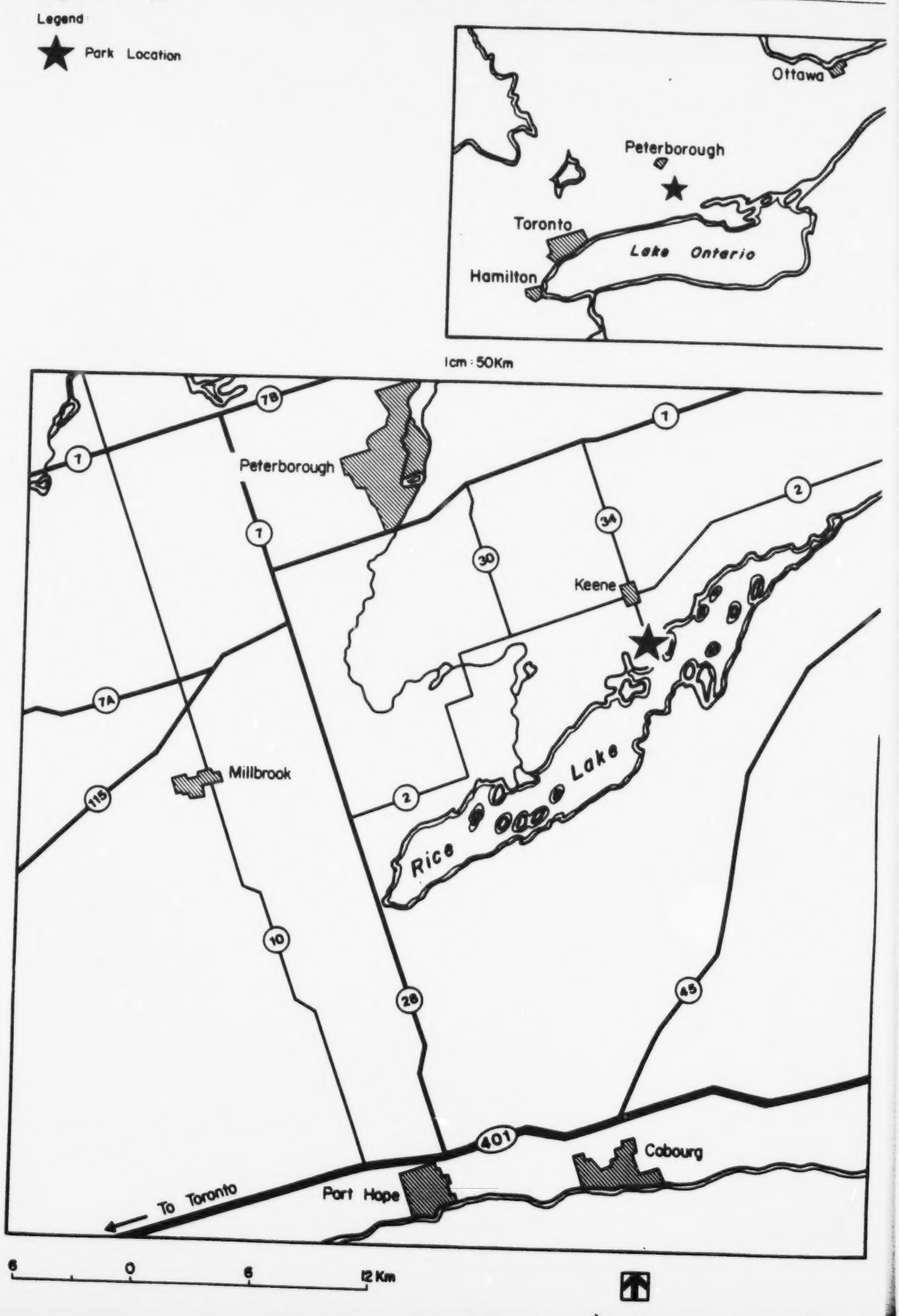
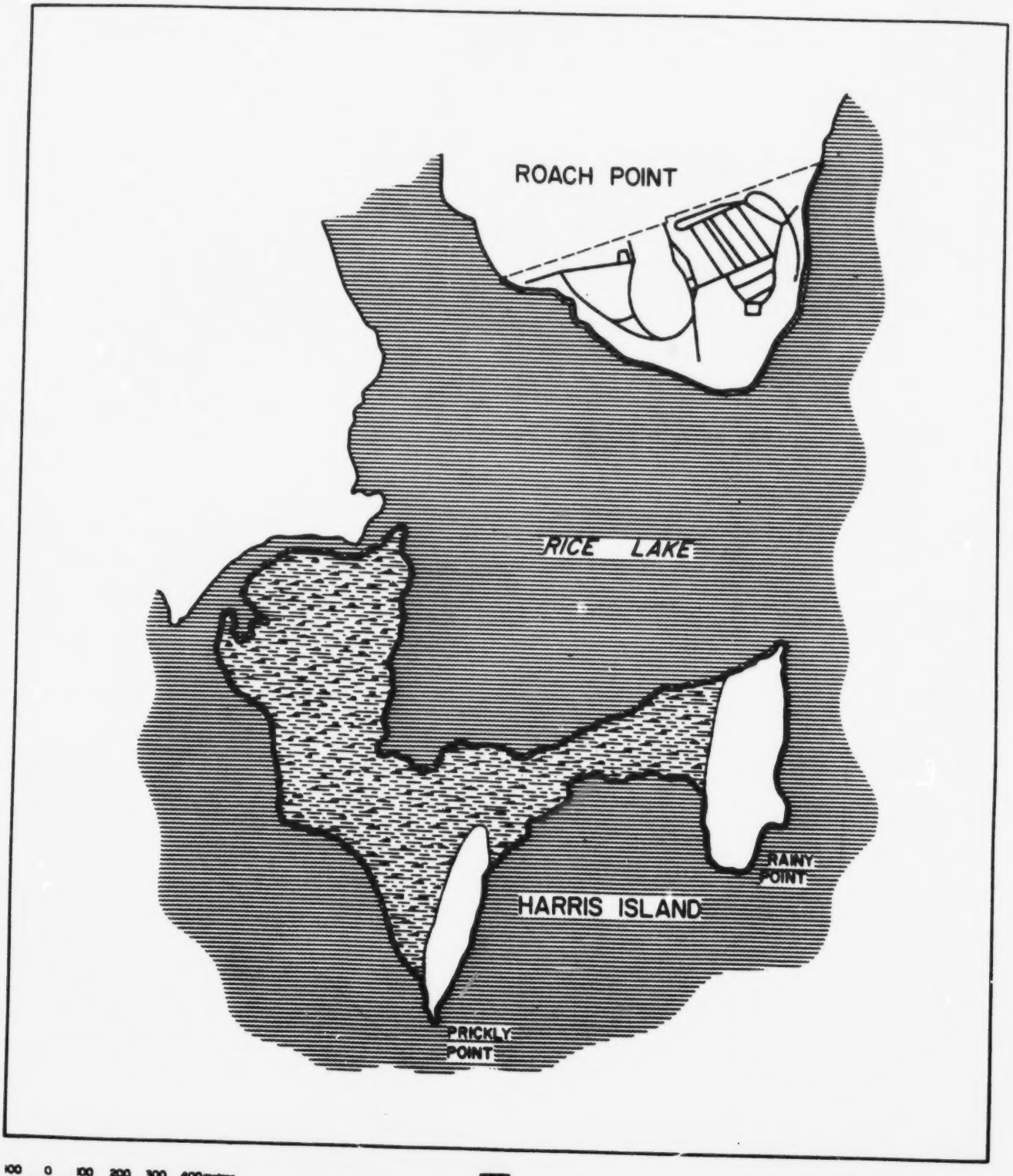


Figure 2

Local Context

Legend:

- Park Boundary
- Upland
- Quaking Bog
- Water



The western half of Harris Island will be zoned natural environment to allow the traditional waterfowl hunt to continue. The park will be reclassified to Historical.

3. PARK POLICIES

3.1 Park Classification

Serpent Mounds will be reclassified from Natural Environment to Historical in order to reflect the provincially-significant historical resources found here.

3.2 Park Goal

To maintain and operate Serpent Mounds within the conditions of the lease with the Hiawatha Indian Band, as a provincial park satisfying resource protection and recreation needs. This will entail protecting and providing opportunities for the interpretation of the significant cultural (historical) and natural resources of the park while at the same time encouraging appropriate recreational use compatible with the protection of these significant resources.

3.3 Park Objectives

3.3.1 Protection Objective

The protection objective of the Ontario Provincial Parks system is to protect provincially-significant elements of the natural and cultural landscape of Ontario.

The protection objective for this park is to protect the provincially-significant Indian Burial Mounds found on Roach Point, as well as the significant life science, earth science and historical resources of Harris Island.

This protection objective will be accomplished through appropriate zoning and management.

3.3.2 Heritage Appreciation Objective

The heritage appreciation objective of the Ontario Provincial Parks system is to provide opportunities for exploration and appreciation of the outdoor natural and cultural heritage of Ontario.

The heritage appreciation objective for this park is to provide a range of opportunities (i.e., facilities) for the exploration, interpretation and appreciation of the provincially-significant historical and natural features found at the park.

3.3.3 Recreation Objective

The recreation objective of the Ontario Provincial Parks system is to provide provincial park outdoor recreation opportunities ranging from high-intensity day use to low-intensity wilderness experiences.

The recreation objective of this park is to provide day use and camping opportunities that utilize the park's prime recreation potential while being compatible with the park's significant resources and its limited land base.

According to the Lindsay District Land-Use Guidelines:

- Day Use Targets

·the park's 210 metres of beach are estimated to represent 5.8% of the district's swimming opportunities to the year 2000 (they presently provide 25.2% of the district's swimming opportunities)

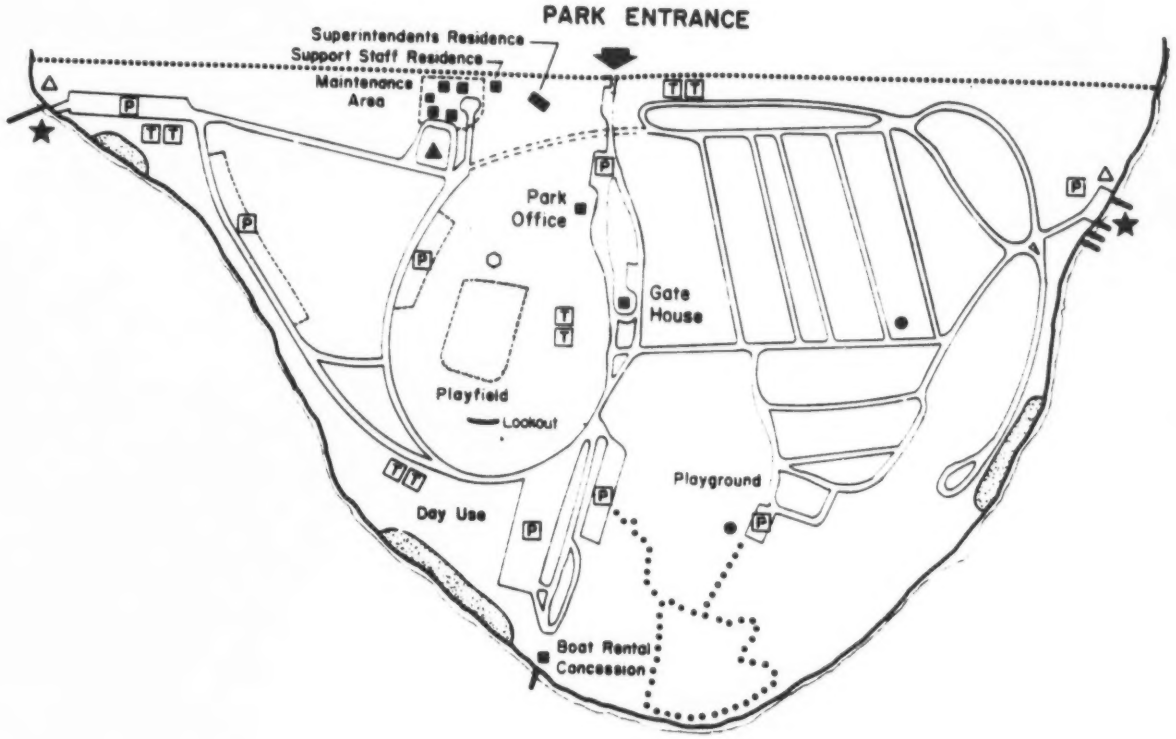
·the park's 289 picnic tables are estimated to represent 11.3% of the district's picnicking opportunities to the year 2000

Figure 3

Existing Facilities

Legend:

- Beach Area
- Docks
- Historical Interpretive Trail
- Boat Launch
- Toilet
- Comfort Station
- Picnic Shelter
- Trailer Sanitation Station
- Parking Area
- Fish Cleaning Station
  No facilities exist on Harris Island



ROACH POINT

30 0 30 60 90 metres

(they presently provide 23% of the district's picnicking opportunities)

- Extended Use Targets

•the park's 113 campsites are estimated to represent 6.1% of the district's camping opportunities to the year 2000 (they presently provide 8.9% of the district's camping opportunities)

(N.B.) The difference in camping, swimming and picnicking percentile opportunities between present day and the year 2000, represents an estimated increase in the number of similar opportunities to be made available elsewhere and does not reflect any proposed decrease in facility-based opportunities at Serpent Mounds.

3.3.4 Tourism Objective

The tourism objective of the Ontario Provincial Parks system is to provide Ontario's residents and out-of-province visitors with opportunities to discover and experience the distinctive regions of the Province.

The tourism objective for this park is to provide Ontario's residents and out-of-province visitors with opportunities to discover and experience the Rice Lake area specifically and the Kawartha Region in general.

Serpent Mounds will provide day use and camping opportunities for the Kawartha Region residents, cottagers, and passing travellers. The park in 1979 contributed almost one and a half million dollars to the provincial economy through park expenditures and tourist spending. It is the objective of the ministry to maintain and possibly increase the economic contribution of this park to the local economy.

3.4 Park Boundary

The park's 108 hectares refers to its land base. However, regulation of the park includes 135 hectares. The difference involves the park's offshore waters, which are actually under federal jurisdiction. A working agreement with the Trent-Severn Waterway will be negotiated in the future in order for the park to obtain authorization for management of this offshore area. The final dimension and size of this extension of the park's jurisdiction will be determined during these negotiations. The present regulated yet unofficial waterlot extends 152.4 metres from shore and includes 26.3 hectares.

When the current park lease is up for renewal in 1995 the ministry's intent is to secure the park for future public use.

Other than this possible acquisition and a waterlot for both Roach Point and Harris Island, there are no plans for any further changes to the boundaries or increase in the size of the park.

3.5 Zones and Zone Policies

All lands within the park will be zoned in recognition of their environmental qualities, required protection and their potential for recreation and interpretive use within the context of the four objectives (see 3.3 Park Objectives). The zones are shown on Figure 4. The ministry will seek the right from the Trent-Severn Waterway to manage the immediate offshore areas and where appropriate, will zone these areas as well.

3.5.1 Historical Zone

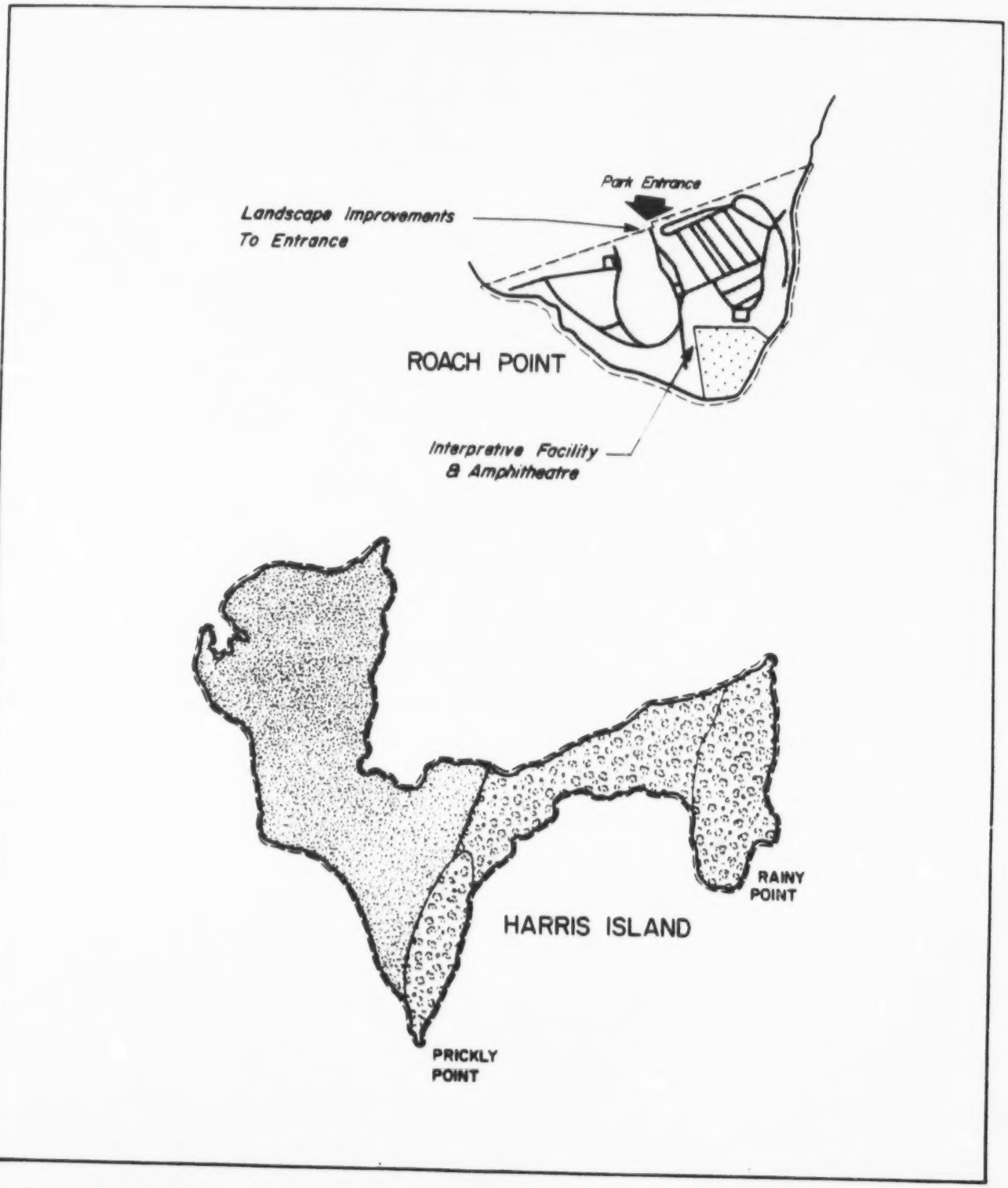
•This zone encompasses the provincially-significant burial mounds in addition to surrounding areas necessary for buffering

Figure 4

Zoning & Proposed Development

Legend:

- Park Boundary
- Development Zone
- Historical Zone
- Nature Reserve Zone
- Natural Environment Zone



100 0 100 200 300 400 metres

purposes. If the park receives authorization from the Trent-Severn Waterway to manage the offshore waters, this zone will be extended out into Rice Lake to protect the underwater Indian Midden (refuse heap).

Historical Zone Policies

·To protect the resource in perpetuity.

·To respect and honour the spiritual beliefs, about these cultural resources, held by the descendants of the mound builders.

·To improve the aesthetics and optimize the setting and siting.

·To enhance the interpretive experience.

·To increase the knowledge of the mounds, the mounds' builders and their society.

3.5.2 Development Zone

·This zone includes the majority of Roach Point, excluding the historical zone, and is where development for day use, camping and managing of the park is located.

Development Zone Policies

·To basically maintain the present level of development, allowing for facility improvements and limited expansion.

·To improve landscape aesthetics.

3.5.3 Nature Reserve Zone

·The eastern portion of Harris Island, specifically the two drumlin uplands (Rainy Point and Prickly Point) and their interconnecting marsh complex are designated as a nature reserve zone.

Nature Reserve Policies

·To protect the provincially-significant life science, cultural features and the regionally-significant earth science features from detrimental forms of development.

·To minimize recreational impacts on the island.

·To monitor recreation activities that do occur to ensure no detrimental effect on the zone's resources.

·To allow natural vegetation regeneration to occur except where some form of vegetation management is proven to be beneficial to the long-term survival of the vegetative community.

·To eventually phase out waterfowl hunting offshore.

3.5.4 Natural Environment Zone

·This western portion of Harris Island is characterized by a wetland marsh/swamp scrub complex, with several entrapped ponds and channels.

Natural Environment Zone Policies

·To protect the natural features from detrimental forms of development and recreational use.

·To monitor recreation activities to ensure no detrimental effect on the zone's resources.

·To allow natural vegetation succession to occur except for extreme cases where vegetative management is proven to be of benefit to the healthy existence of the indigenous vegetation community.

·To allow the continuation of the traditional waterfowl hunt and trapping, but eventually make the hunt controlled.

4. RESOURCE MANAGEMENT

4.1 Landform and Water Management

·The beaches will be replenished with sand as needed, in the interim, until a Shoreline Management Plan is carried out, dealing with all aspects of shoreline erosion.

·The following measures may be undertaken to control the effect of erosion on Roach Point:

1. where appropriate, establish native plant species along the shorebluff that are suitable for stabilizing slopes.
2. controlling pedestrian circulation on the shorebluffs near the burial mounds by strategically locating beach stairs for access as well as providing vegetative barriers.

4.2 Vegetation Management

·Management of existing vegetation and proposed planting projects including a mowing program will be addressed in a Vegetation Management Plan. This plan will also address the possible (anthropological) associations of the existing vegetation with earlier occupations of the site.

·In the development zone, natural regeneration of the east slope may be assisted with the planting of species as well as scarification to encourage seeding in. Emphasis will be on the establishment of longer living and more desirable species.

·In the historical zone, existing non-native species that are not necessary for a functional purpose (e.g., visual screening) will be removed. A more effective vegetative screen than exists at present is required between the historic zone and the comfort station/campground area to the north. Visual buffering is also needed between the campsites within the campground. Grass on the historic mounds will be kept neatly trimmed at all times in order to accentuate the shape of these landforms. The scenic viewing potential from the mound area over Rice Lake, will be enhanced by selective vegetative thinning and trimming. Management of the understory of the oak forest (e.g., brushing, poison ivy control) will be performed so as to have little adverse impact on the significant herbaceous species growing there. Measures will be taken to ensure the survival of secondary regenerative growth of desirable hardwood and herbaceous species.

·The vegetative community of Harris Island (Nature Reserve and Natural Environment Zones) will be allowed to evolve with a minimum of management.

·For the park in general, acceptable management procedures involve controlling native and non-native insects and diseases that threaten the values for which the park was established or values outside of the park. Where control is desirable, it will be directed as narrowly as possible to the specific insect or disease so as to have minimal effects on other components of the park's environment.

4.3 Fauna Management

·Sport fishing will be

encouraged offshore from the park. When the park receives authorization to manage its offshore waters, commercial fishing and bait fishing will not be allowed in these waters.

•A Wildlife Management Plan is proposed for the park. A topic to be addressed includes waterfowl hunting on Harris Island. A controlled waterfowl hunt (spatial, temporal and number restrictions) will be phased in on the western half (Natural Environment Zone) of Harris Island. At present, this hunt is uncontrolled. This hunt will be phased out on the eastern half (Nature Reserve) of the island. Until the waters around Harris Island are under the jurisdiction of the park, waterfowl hunting can occur immediately offshore from the nature reserve.

•Traditional trapping by local native groups will be allowed to continue on Harris Island.

•Animal control, if necessary, may be carried out under the strict supervision of or directly by the Ministry of Natural Resources.

4.4 Cultural Resource Management

•Only authorized exploration of cultural resources (mound, midden shell pile, surface collecting) will be permitted, and will be authorized by the Ministry of Natural Resources and the Ministry of Citizenship and Culture.

•Harris Island requires further authorized archaeological exploration to confirm the significance of the resources found there.

•Park staff will continue its liaison with the local Hiawatha Indian Band regarding items of mutual interest.

•Because of the park's provincially-significant cultural resources, a Cultural Resource Management Plan is proposed to outline measures of protecting, interpreting and researching this resource.

5. CLIENT SERVICES MANAGEMENT

5.1 Visitor Services

As a provincial park with provincially-significant cultural and life science features as well as regionally-significant earth science features to interpret, a variety of visitor services opportunities should be provided. Of the four visitor service components (i.e., communication, interpretation, recreation and outdoor education) the former two are emphasized at this park.

5.1.1 Communication

Objectives of this component should include the following:

- informing visitors about the park, its services, facilities and management concerns
- informing visitors about recreation and interpretive opportunities in the local area
- informing visitors of the role of the Ministry of Natural Resources
- instilling a sense of respect in visitors for the park environment
- providing a means of feedback for visitors to communicate with the Ministry

The objectives outlined above will be achieved through all or some of the following: publications, signage, audio-visual presentations, displays, mass media and personal contact including campsite visitation.

5.1.2 Interpretation

The following is a list of major and minor themes that will be interpreted:

·Point Peninsula People - the builders of the burial mounds

- Archaeology of the burial mounds and the native peoples' culture that built them.

·A.N.S.I. - Areas of Natural and Scientific Interest

- Harris Island has provincially-significant plant species.

·Geomorphology

- The process of glaciation and how it has affected the geomorphology of the area (Peterborough Drumlin Field).

·The Trent-Severn Waterway

- Its origin, how it has changed, its history and its recreational use.

·Rice Lake

- Its historic setting and its ecology.

All of the above themes can be interpreted in publications, evening programs, special events and interpretive facilities. An interpretive centre will be designed to hold up to 60 people and will be located so as to be the initial orientation centre before exploring the mounds and viewing the landscape.

Because of the mounds' importance, a self-guided historic walk, with interpretive displays strategically located along the walk, is provided. This same walk, with its unobstructured views provides prime opportunities for interpreting the geomorphological features of Rice Lake and the surrounding landscape.

5.1.3 Recreation

Water-oriented recreation will be emphasized because of the park's limited land base and because of the park's access to the outstanding recreational opportunities provided by Rice Lake and the Trent-Severn Waterway System.

The park will provide a wide range of self-use facilities, oriented to the water (e.g., boat launch, docks, beaches, fish-cleaning tables).

Land-based recreational opportunities are centered on the campground, the day-use area and the historic mound area.

To supplement the park's recreation facilities, a free recreation equipment loan program may be offered.

Limited staff-led recreation activities will be provided as funds and staff priorities permit.

5.1.4. Outdoor Education

Serpent Mounds will encourage local and regional school boards to make educational use of the park's significant resources. To enhance this educational experience, publications such as "A Teachers' Guide to Serpent Mounds Provincial Park", will be available. The proposed 60-seat interpretive centre will be the major orientation and educational resource centre for groups.

5.2 Recreation Management

During off-season, when the park's facilities are closed, park patrons have access to the park's land base for recreational pursuits (e.g., walking, cross-country skiing, tobogganing, etc.).

•Demand for mooring facilities by users of the Trent-Severn Waterway System will be monitored and if a demand is proven, mooring of boats may be provided for.

•Park activities and facilities will be directed by guidelines and procedures in accordance with the Serpent Mounds Management/Operating Plan.

•Park patrons will be encouraged to use recreational opportunities and facilities outside the park, as well as inside the park.

5.3 Commercial Services

The following existing commercial tourism services are available at the park:

- wood concession
- laundromat concession
- canoe and paddleboat concession

Additional concessions may be added or existing ones modified in some way, according to: the district parks and recreation section, demand, and park's goals and objectives.

5.4 Marketing

Marketing and promotional initiatives will be implemented in order to obtain the following results:

Priority One - to attract more day users who stay in local commercial accommodation, particularly during the midweek of the spring and fall shoulder season, as well as in winter.

To accomplish this, park management will contact local commercial accommodation establishments with information on the park, and on combined Petroglyphs Provincial Park and Serpent Mounds tours. Trent University, in Peterborough, and other conference organizing agencies will be contacted regarding group conference tours. Bulk group carriers (i.e., bus tours) will also be contacted.

Priority Two - to increase midweek camping use during the May/June/September shoulder season.

To accomplish this, local tourist associations will be supplied with park information (i.e., Central Ontario Travel Association, Peterborough Kawartha Tourism and Convention Bureau, Great Pine Ridge Tourist Association). Provincial and local tourist information centres will also be supplied.

Priority Three - to attract more home-based day users especially where high volume of users can be achieved.

Park management will approach group tour operators within day-use travelling distance of the park.

6. DEVELOPMENT

The Ministry of Natural Resources operates and provides facilities for this park on Roach Point, which is leased land. The current lease, expiring in the mid-1990's, does not contain a renewal clause. Because of this situation, there are no plans for any major new investment in permanent facilities (except for a visitor centre) until the future of the park is resolved. However, in order to maintain provincial park facility standards and maintain adequate levels of visitor services, minor expansion and improvement of existing facilities, as well as provision of temporary facilities is warranted. Approved site plans are also required for all forms of development.

At present, a full range and adequate supply of facilities for camping and day use have been developed. Development items include:

- campground rehabilitation allowing up to 10% of the sites to be closed at any one time, and
- aesthetic improvements to the main entrance of the park
- new interpretive facilities
- a major replanting effort (see Section 4.2).

As previously mentioned, until the future of this park is resolved, no major capital expenditures on permanent facilities is proposed. Therefore in order to provide the interpretive facilities, a temporary building (prefabricated) is proposed. An outdoor amphitheatre will be provided in conjunction with an interpretive facility.

The Lindsay District Land-Use Guidelines recommend approximately 10 picnic tables be located on Harris Island. Due to the environmental impact, and operational logistics, no picnic tables will be located on the island.

7. IMPLEMENTATION STRATEGY

In terms of priority ratings of the development items listed in the previous section, provision of an interpretive facility ranks high.

The Vegetation Management Plan (see Section 4.2) contains two recommendations requiring implementation. Once a planting plan has been prepared, implementation will be phased in as supplies and monies permit.

A Wildlife Management Plan and a Coastal Resource Management Plan are high priorities as well.

8. PUBLIC CONSULTATION

Public consultation during the management planning process for Serpent Mounds focused on the local area and included the following:

- a news release and advertisement in the Peterborough Examiner, Lindsay Post and Lindsay This Week.

- copies of the plan forwarded to the Township of Otonabee, Municipal Office and the Otonabee Region Conservation Authority

- copies of the news release sent to the following interest groups: Hiawatha Indian Reserve, Royal Ontario Museum, Ministry of Citizenship and Culture, Trent University, National Museum of Man, and the Ontario Archaeological Society

- where appropriate, contact made with adjacent landowners by park management, to inform these landowners of the plan and its contents

- announcements and posters on display in the park during the summer of 1984 advising park visitors of availability of plan for review

All comments and suggestions received from the public, were considered while finalizing this plan.

This management plan will be reviewed when major issues surface and at least once within the next ten years. Any necessary plan amendments will be made with public involvement in accordance with apparent needs.

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